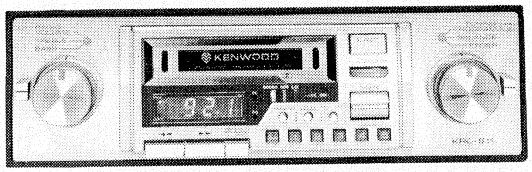
KENWOOD

CASSETTE RECEIVER

KRC-511

INSTRUCTION MANUAL



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Take the time to read through this instruction manual. Familiarity with installation and operation procedures will help you obtain the best performance from your new cassette receiver.

FOR YOUR RECORDS

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on this product.

Model KRC-511 Serial number _____

AFTER UNPACKING

After unpacking, we recommend that you inspect the unit for any possible shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend that you retain the original carton and packing materials to prevent any damage should you transport or ship your unit in the future.

NOTE: **When the power is applied for the first time after installation and connection, a meaningless digital figure will be displayed. However, when the radio frequency and the clock time have been set once, a proper display will be made due to the memory back-up power supply (direct from the battery) which has no relation to the ON/OFF status of the power to the Cassette Receiver itself nor the ignition switch.**

*Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

FEATURES

Your new KRC-511 is a super-sensitive AM/FM/MPX radio combined with a precision-engineered high-fidelity stereo cassette player. This innovative system has been designed for in-dash installation and for negative-ground type power systems.

- **Electronic Quartz Synthesized Tuning**

By employing a tuning system that combines a phase-lock loop quartz synthesized tuner and a microcomputer, high accuracy and constancy in radio frequency reception are achieved. Furthermore, the frequency being received can be readily confirmed by checking the LED display.

- **ANRC (Automatic Noise Reduction Circuit)**

Functions to automatically switch, when the FM signal weakens, from Stereo to LR Blended Signal to Mono to Mute so that you can enjoy high quality FM reception, irrespective of the ever-changing position of your vehicle.

- **Auto Reverse Function**

When the end of tape is reached, tape direction is automatically reversed from side-A to side-B or vice versa and tape continues to play. Auto reverse continues as long as tape is engaged.

- **Ignition Key-off Eject Function**

The cassette will partially eject when the ignition is turned off, thus preventing the unit or tape from being damaged.

- **Automatic Loading**

- **CASSETTE STANDBY**

Permits a cassette to be on standby in the loading slot while listening to the radio, to automatically begin playing if the radio signal becomes weak.

- **DOLBY* N.R. System**

DOLBY Noise Reduction applied in both FM tuner and cassette signal processing.

INSTALLATION

Your KRC-511 comes with a complete kit that includes a mounting strap, bolts, washers, a front trim plate, accessory plate and control knobs. Fig. 2 shows the proper installation procedure. Look at the diagram and make sure that you have all the necessary parts. Then, begin this procedure.

Before installation, check the shaft span of the unit against the openings on the dashboard of your car. If the openings do not coincide with the present shaft span of the unit, readjust it in the following manner.

1. Loosen the hexagonal nuts on both shafts until the claws on the fitting plates can be retracted from their present slots.
2. Move the claws of the fitting plates to other slots until the shaft span fits the dashboard openings.
3. Tighten the nuts.

1. Secure one end of the mounting strap to the rear of the unit, then the other end to the desired position on the fire wall as illustrated in Fig. 2-1 or Fig. 2-2 on next page.
2. Place spacing washers and nuts on the control shaft as illustrated. Then, after fitting the front trim plate and accessory plate, mount the washers and nuts on the control shafts to attach the front plates securely to the dashboard.

SHAFT SPAN AND NOSE PIESE OPENING DIMENSIONS

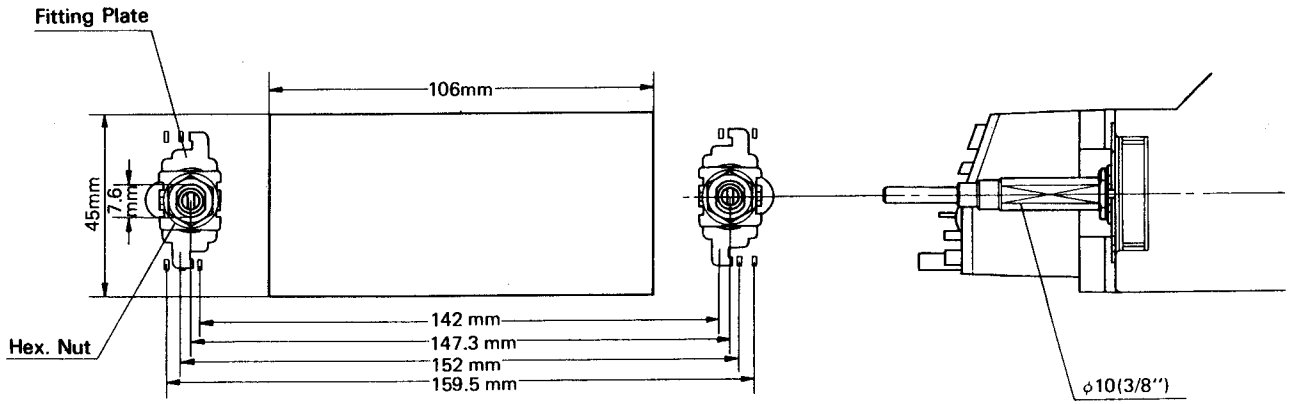


Fig.1

INSTALLATION

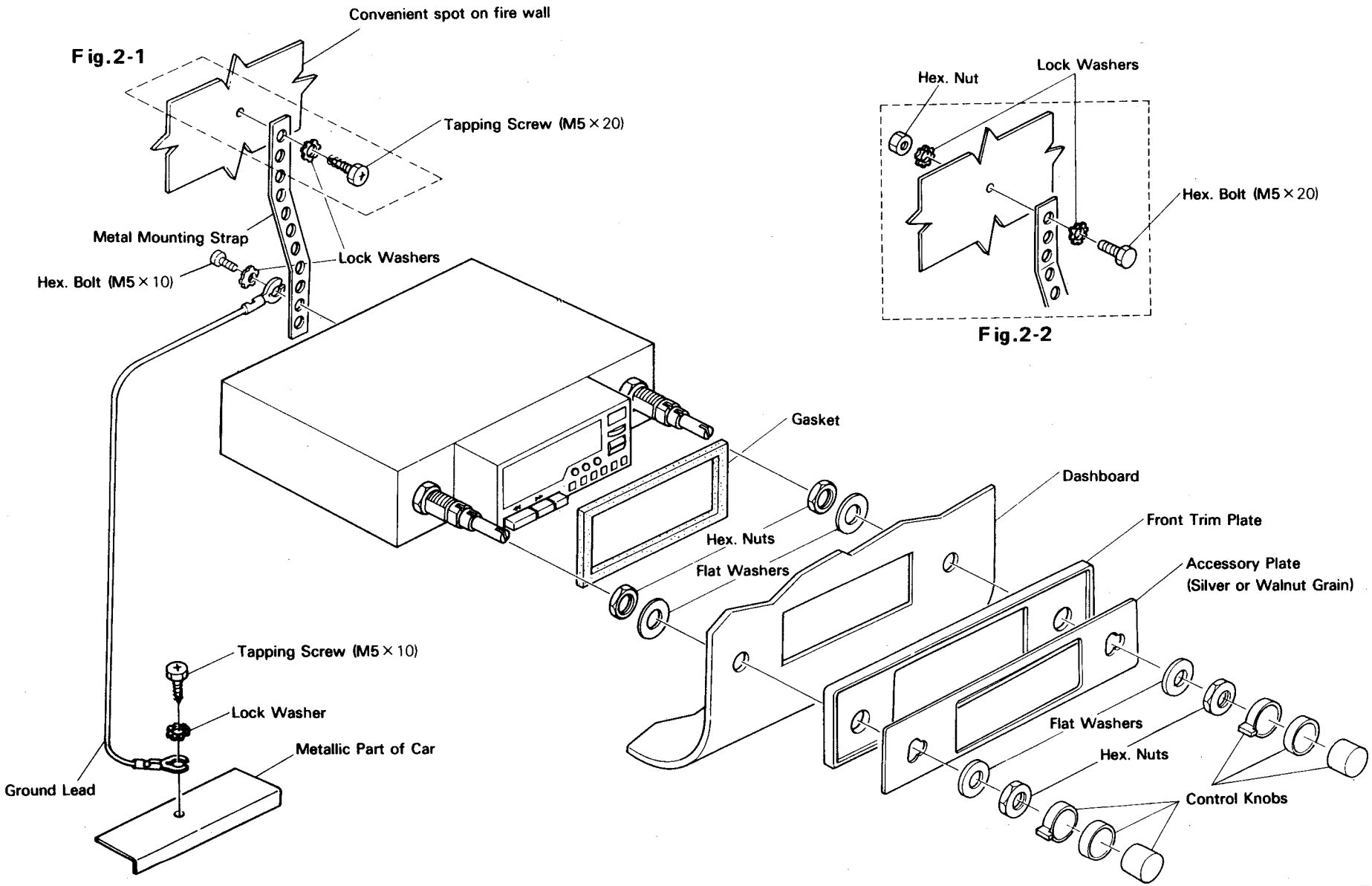


Fig.2

CONNECTIONS

After installing all components, connect the wiring according to Fig. 3.

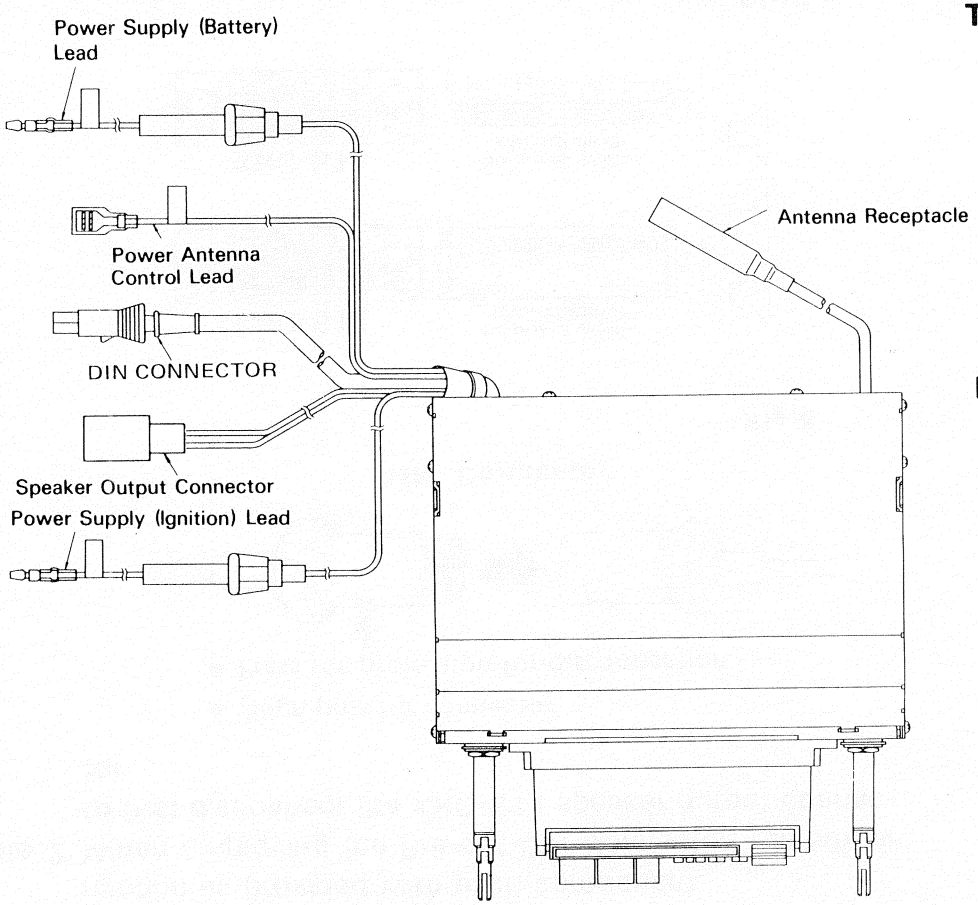
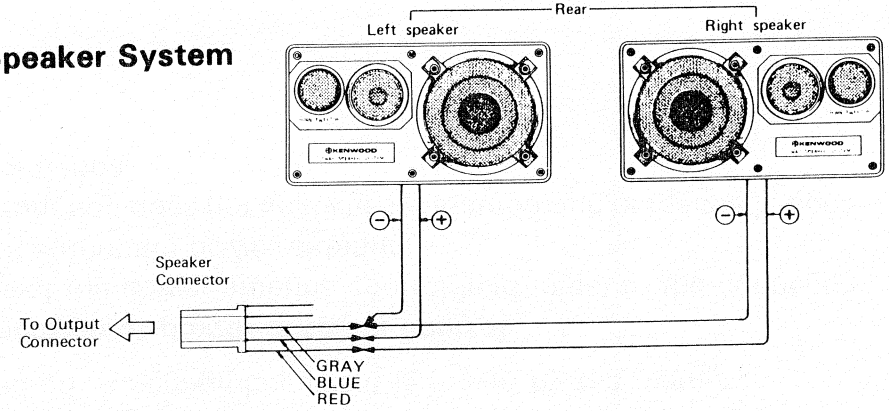
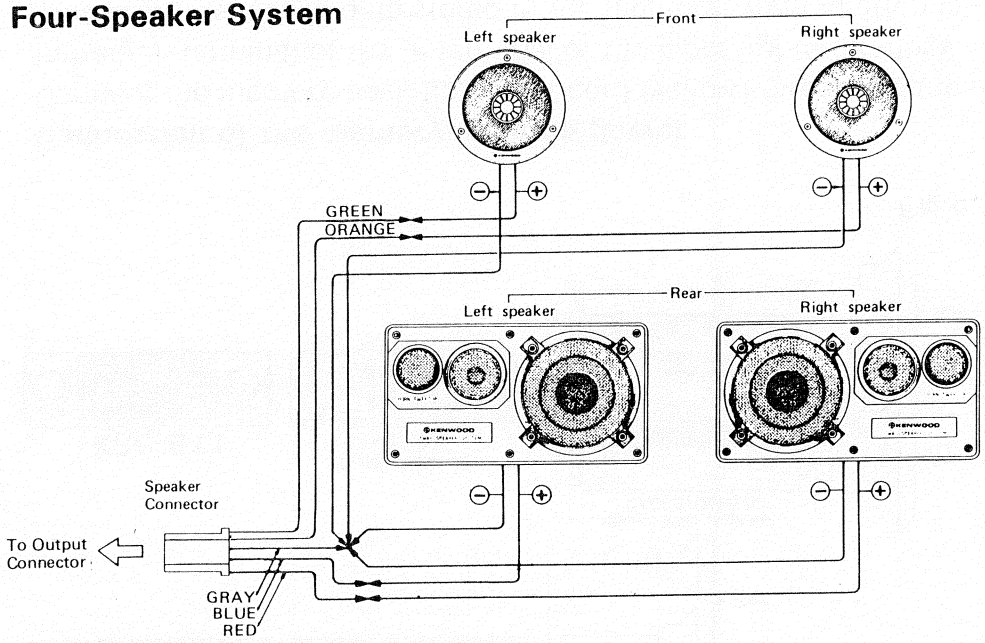


Fig.3

Two-Speaker System



Four-Speaker System



NOTE: When using two-speaker systems, be sure to cover the two other unused lead wires at the speaker connector with tape or use wire nuts to insulate them.

NOTE: Be sure to connect the speaker cable to the speaker connector cable either with a wire nut or solder, and then cover with tape.

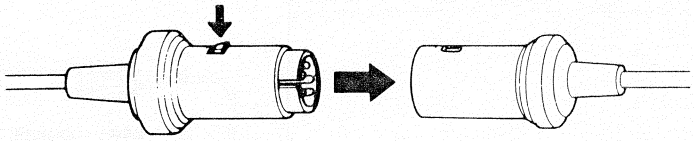
• Pre-out DIN Connector

As shown in Figures 4 through 6, connect it to the input DIN connector of components such as a graphic equalizer, graphic equalizer amplifier or high-power amplifier to upgrade the quality of your car audio system.

In such cases, the power ON/OFF of the component(s) is controlled by the power ON/OFF switch of your KRC-511.

Note 1: Do not fail to follow the respective instructions for connection as provided with each component.

Note 2: When employing the Pre-out DIN Connector, remember to first disconnect the KRC-511 speaker output connector.



DIN Connector

Fig.4

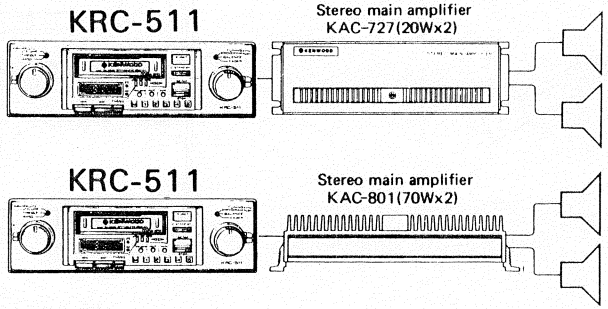


Fig.5

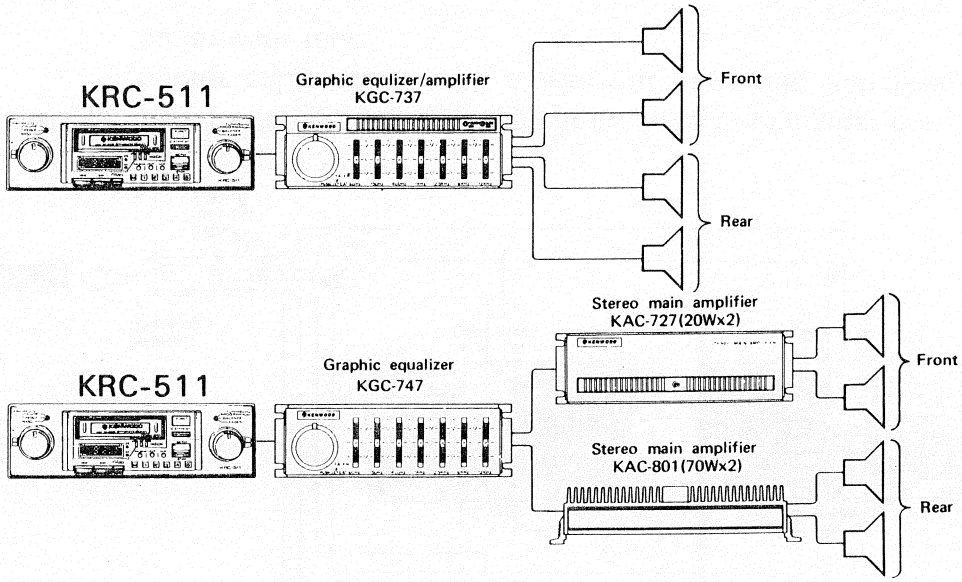


Fig.6

Connection of the memory back-up power

Connect the memory back-up power cord (yellow) directly to the battery + terminal or the + terminal of the cigar lighter or clock. This prevents loss of data stored in the memory when ignition is turned off. A negligible current is drawn by the memory.

Connection of power antenna control

Connect the power antenna control lead (blue) to the connector of full automatic power antenna.

This function does not apply to semi-automatic or manually operated antenna.

CONTROLS & INDICATORS

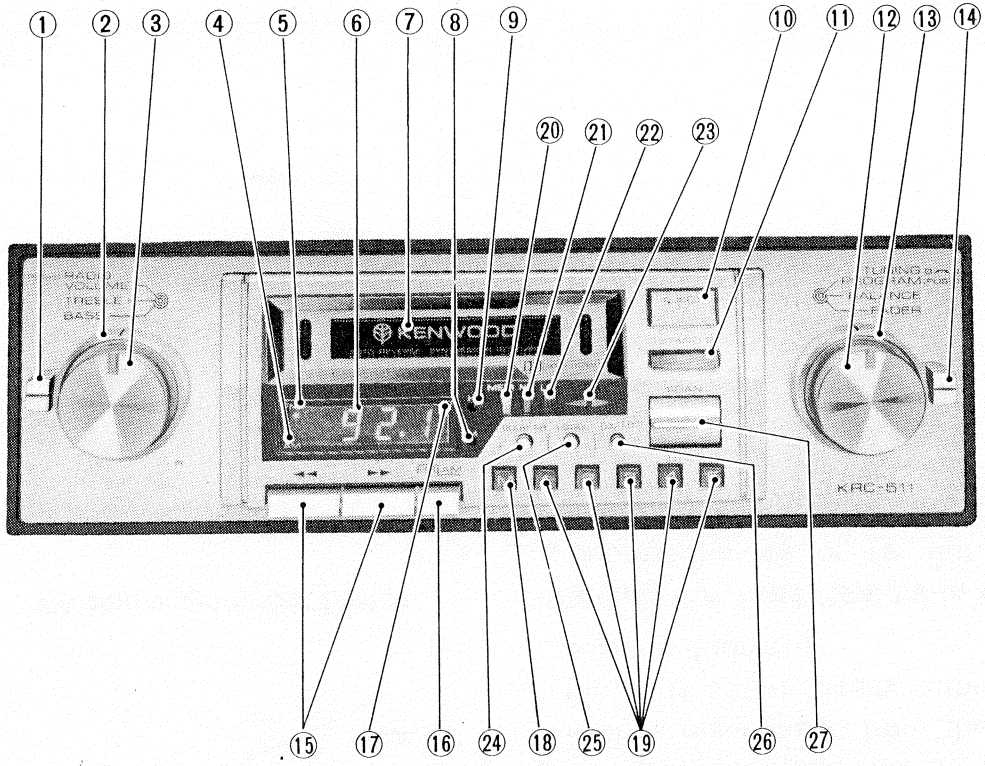


Fig.7

(1) BASS Control Knob
(2) TREBLE Control Knob
(3) SW/VOLUME Control Knob
(4) AM Indicator
(5) FM Indicator
(6) Radio Frequency/Clock Display
(7) Loading Slot
(8) MINUTE Adjustment Hole
(9) HOUR Adjustment Hole
(10) EJECT Touch Button
(11) CASSETTE STANDBY Switch
(12) TUNING Control/PROGRAM Switch
(13) BALANCE Control Knob
(14) FADER Control Knob
(15) FF (Fast Forward) and REWIND Button
(16) FM/AM Band Select Switch
(17) FM STEREO Indicator
(18) MEMORY Switch
(19) PRESET Switch
(20) MEMORY Indicator
(21) DOLBY N.R. Indicator
(22) LO Indicator
(23) TAPE Play Direction Indicator
(24) DOLBY N.R. Switch
(25) LOUDNESS Switch
(26) DX/LO Switch
(27) SCAN/STOP Switch

OPERATION

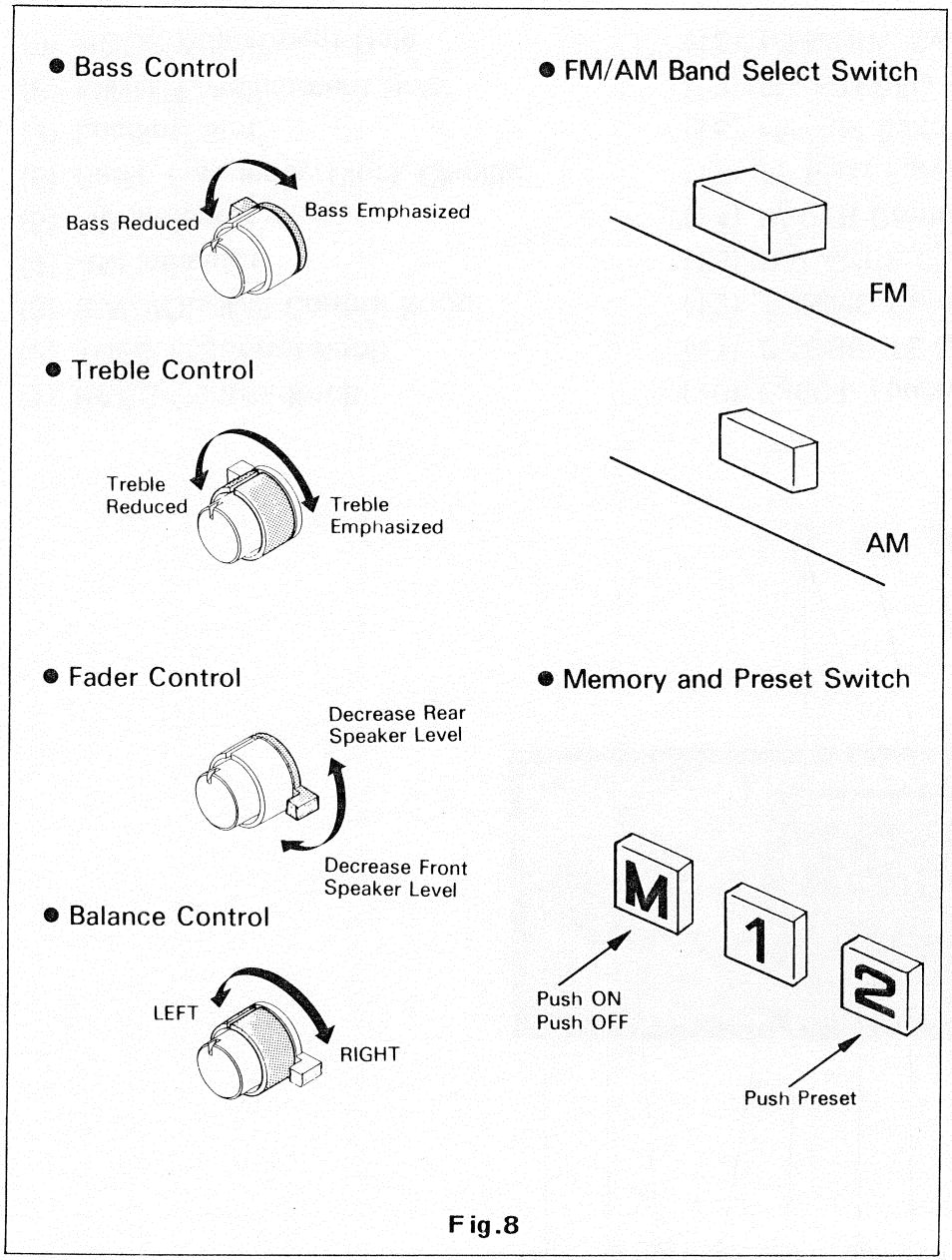


Fig.8

TAPE PLAYER

1. With the tape opening to the right insert the cassette into the loading slot as far as it will go. The unit is then turned ON, accordingly the tape direction indicator will light and tape will begin playing.
2. Adjust the controls VOLUME, BALANCE, BASS, TREBLE and FADER to suit your listening preference. Depress the LOUDNESS switch if you normally listen at low volume levels.
3. Tape reverses automatically at end of tape to play the other side.
4. To change from side A and play side B or vice versa before reaching the end of the tape, press the PROGRAM button once.
5. To stop the play, depress the EJECT touch button. The cassette is then disengaged from the tape transport mechanism, the player is automatically turned OFF and the cassette can be easily withdrawn.

Winding the Tape Rapidly in Forward or Reverse Direction

1. Depress the ◀◀ or ▶▶ button until it locks in the IN position and the tape will run rapidly in the designated direction.
2. Lightly depress the other button to stop the fast winding mode. The tape will start playing again.

Cassette Standby

1. Switch on the radio and tune in the desired station.
2. Depress the Cassette Standby Switch to ON.
3. Insert the cassette into the loading slot.
4. In this mode, the cassette will automatically begin playing should the radio signal become weak and will continue to play until the cassette is ejected.

Cassette Standby operates only when both the Radio ON-OFF switch and Cassette Standby switch are set to ON. You can confirm this status by the fact that Cassette Standby switch is lit.

NOTE: **If the ignition key is switched OFF while the unit is in the cassette standby mode, the cassette will not eject automatically. However, in this case there is no fear of damage to the cassette tape or the mechanism, since the tape is not in contact with the pinchroller, the capstan nor the tape head.**
Therefore, if you wish to eject the cassette, first turn the cassette standby switch OFF with the ignition key set in the ON position, then either press the Eject Button or turn the ignition key OFF.

• DOLBY N.R. Switch

Depress DOLBY N.R. switch to play back a tape recorded through DOLBY N.R. system or to receive DOLBY FM. DOLBY N.R. Indicator lights in this mode.

RADIO

Manual Tuning of FM

1. Switch on the radio by pushing the volume control knob.
2. Set control knobs, BASS, TREBLE, BALANCE and FADER, to the center positions.
3. Release the FM/AM band select switch to selecct FM reception.
4. Turning the TUNING control knob counterclockwise will cause frequency to fall and clockwise makes frequency rise.
5. Then adjust the Volume Control to the desired sound level.

The Frequency changes in descending or ascending sequence each time the knob is turned and released. Frequency changes continue while the knob is held at either position.

Manual Tuning of AM

Depress the FM/AM band select switch to select AM reception. Other procedures are the same as FM tuning.

NOTES 1: **While a cassette tape is loaded in the slot, the radio cannot be played and its ON switch will not function, so be sure to first press the EJECT button and remove the tape before switching the radio ON.**
2: **Since a Synthesized Tuning System is employed, tuning is in steps of 200 kHz in FM band and 10 kHz in AM band.**

OPERATION

Automatic Scan Tuning of FM

1. Switch on the radio by pushing the volume control knob.
2. Set control knobs, BASS, TREBLE, BALANCE and FADER, to the center positions.
3. Release the FM/AM band select switch to select FM reception.
4. Press up the SCAN/STOP switch to allow SCAN operation to select a desired FM radio station.
5. After station selection, press down the SCAN/STOP switch to discontinue scanning.
6. Then adjust the Volume Control to the desired sound level.

Automatic Scan Tuning of AM

Depress the FM/AM band select switch to select AM reception. Other procedures are the same as FM tuning.

NOTE: **Be sure to press down the SCAN/STOP switch as soon as the desired station has been selected, since otherwise the automatic scanning will resume after a pause of a few seconds.**

Frequency check

Press down (stop position) the SCAN/STOP switch to ascertain the frequency during radio reception. The frequency being received will be displayed for several seconds.

Clock Adjustment

For HOUR ADJUSTMENT and MINUTE ADJUSTMENT, insert a small peg, such as the tip of a ball-point pen, in the respective hole and push lightly. The digital display will advance step by step with each push. Push repeatedly until the correct hour and minute display is reached.

Memory Operation

1. Switch on the radio by pushing the volume control knob.
2. Set control knobs, BASS, TREBLE, BALANCE and FADER, to the center positions.
3. Set FM/AM band select switch to FM or AM reception.
4. Select the station manually or by Scan Tuning.
5. Depress the MEMORY switch. MEMORY Indicator will light and presetting is enabled.
6. Depress PRESET switch [1] to store the station's frequency.
7. Similarly, depress switches [2], [3], [4] and [5] respectively to preset desired stations after following procedures 3–6.

DX/LOCAL Switch Operation

FM: The DX/LO switch permits selection of the DX or Local mode during Automatic Scan Tuning of FM. In strong radio field areas such as within the city, scanning in LO mode will select only the stations which permit strong and stable FM reception.
In the outskirts or other weak radio field areas, set this switch to the DX position by depressing twice. The mode selected by this switch functions during the Automatic Scan Tuning of FM only.
During radio reception, sensitivity is kept to the maximum, independent of this switch.

AM: Normally, leave this switch in the DX position. However, when a strong radio signal station is to be selected by Automatic Scan Tuning of AM or when interference to AM reception occurs in the strong radio field area, set this switch to the LO position by depressing it once.

CARE & MAINTENANCE

Prior to Use

Before playing a cassette, make sure there is no excess tape slack. If necessary, insert a pencil or a similar object into the reel hub as shown in Fig. 9 and rotate it to wind up the slack. A small amount of slack will not cause malfunction.

Do not use the unit if it has become extremely hot, such as when a car has been parked in direct sunlight. Allow the unit to cool by air circulation while the car is in motion before using.

To Release Fast Forward or Rewind

To release fast forward or rewind operations, lightly depress the opposite button. (Depress Rewind to stop FF, and vice versa.) Forcing the FF/REW knob may damage the car stereo.

Automatic Reverse

Tape reverses automatically at end of tape to play the other side. Reversal will continue indefinitely, unless the cassette is ejected. At the end of tape in Fast Forward, tape will stop, reverse, and resume at normal speed.

Recommended Cassette Tape

C-30, C-60, C-90 Tapes are recommended. Avoid the use of C-120 tapes which are rather thin and prone to snarl.

Maintenance

The tape head should be cleaned regularly, especially when playback sound begins to deteriorate. Insert a special head cleaning cassette into the tape-loading slot and allow it to run for a few minutes to remove any foreign matter, or gently scrub with a cotton applicator moistened with alcohol until all traces of dirt are removed. See Fig.10.

When your tape is not in use, snap the plastic clips provided with your cassette into the spindle holes of the cassette to secure the tape in place.

To protect your cassette tapes, store them in a cool place away from dust, dirt, and strong magnetic sources such as electric motors and TV sets.

In Case of Trouble

If the unit does not operate properly, contact your dealer or the nearest authorized KENWOOD Service Station.

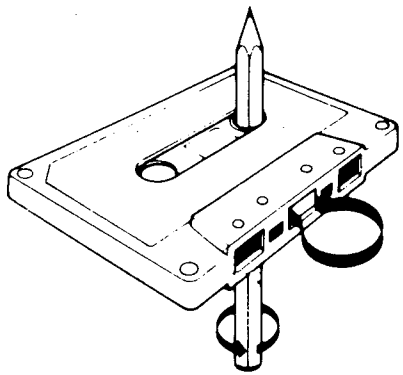


Fig.9

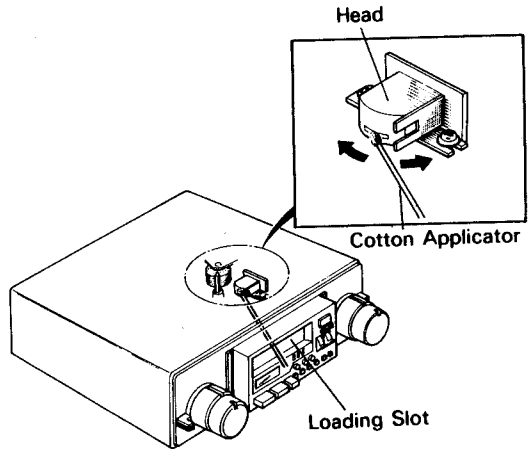


Fig.10

SPECIFICATIONS

FM Tuner Section

Frequency Range	88.1–107.9 MHz
Channel Space	200 kHz
*Usable Sensitivity	14.8 dBf (1.5 μV/75Ω)
*50 dB Quieting Sensitivity	18.4 dBf (2.3 μV/75Ω)
*Frequency Response	30–15,000 Hz±2 dB
Signal to Noise Ratio	70 dB (Mono)
*Alternate Channel Selectivity	65 dB
*Capture Ratio	1.5 dB
*Image Response Ratio	75 dB
*IF Response Ratio	80 dB
Stereo Separation	35 dB at 1,000 Hz

AM Tuner Section

Frequency Range	530–1,610 kHz
Channel Space	10 kHz
Sensitivity	30 μV

Cassette Deck Section

Tape Speed	4.76 cm/sec (1-7/8 ips)
*Wow and Flutter	0.12% (WRMS)
Fast Winding Time	80 sec (C-60)
*Frequency Response	40–14,000 Hz±3 dB
*Stereo Separation	35 dB
Signal to Noise Ratio (A-Weighted)	
Dolby ON	60 dB
Dolby OFF	52 dB

Audio Amplifier Section

*Power Output	4W per channel into 4Ω (1,000 Hz, 1% THD)
*Frequency Response	30–40,000 Hz±3 dB
*Tone Action	
Bass (100 Hz)	±10 dB
Treble (10 kHz)	±10 dB
Preamp Output Voltage	300 mV (FM 100% Mod. 0.3% THD)

General

Operating Voltage	DC14.4V (11–16V allowable) Negative Ground
Body Size (W×H×D)	182×70×135 mm (7-3/16″×2-3/4″×5-5/16″)
Nose Size (W×H×D)	105×44.5×46 mm (4-1/8″×1-3/4″×1-13/16″)
Weight	2.1 kg (4.6 lbs)

*Car Stereo manufacturers Ad Hoc Committee Specifications.

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